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| Application | /Control | No. |
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10/760,144

Examiner

Matthew J. Song

Applicant(s)/Patent under Reexamination

KIM ET AL.

Art Unit

1722

| <b>4</b> | Rejected |
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| II       | Allowed  |

| _ | (Through numeral)<br>Cancelled |
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Interference

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| Cla         | im       | Date      |          |               | Claim Date |              |                |          |                 |           |                | $\neg$   | Claim Date                                       |          |                 |          |             |          |          |  |          |                 |            |                 |  |          |          |          |          |           |          |  |
|-------------|----------|-----------|----------|---------------|------------|--------------|----------------|----------|-----------------|-----------|----------------|----------|--|----------|-----------------|----------|-------------|----------|----------|--|----------|-----------------|------------|-----------------|--|----------|----------|----------|----------|-----------|----------|--|
| <u> </u>    |          |           |          |               |            | Н            |                | T        |                 |           |                |          |  |          |                 | $\dashv$ | <del></del> |          | Date     |  |          |                 |            |                 |  |          |          |          |          |           |          |  |
| ਯ           | Original | 7/10/06   |          |               |            |              |                |          |                 |           | - <del>-</del> | Original |  |          |                 |          |             |          |          |  |          | =               | Original   |                 |  |          |          |          |          |           |          | ĺ  |
| Final       | rigi     | 5         | 1        |               |            | -            | 1              |          |                 |           | Final          | ļ į      |  |          |                 | ľ        | ı           | Į        |          |  |          | Final           | ġ          |                 |  |          |          |          |          |           |          |  |
|             | 0        | 1         | l        |               | ļ          | 1            |                |          |                 |           | -              | ΙÕ       |  |          |                 | ı        |             |          |          |  |          | -               | Ō          |                 |  |          | ı        |          |          |           |          | ĺ  |
|             | 1        | 7         | 1        | 1             | 1          | 1-           | ╁╴             | 1        |                 | Н         |                | 51       | <del>                                     </del> | $\dashv$ |                 | _        |             |          | -        |  | ┥        |                 | 101        | ┢╌              | $\vdash$   | $\dashv$ | $\dashv$ |          |          | Н         | _        | <del> </del>                                     |
|             | 2        | 1         | ✝        | ┢             | Т          | T            | T              |          | İΤ              | -         | <b>-</b>       | 52       |  |          |                 | $\vdash$ | -           | $\dashv$ | $\dashv$ | $\dashv$                                       | ┨        |                 | 102        | ┢               | <del>                                     </del> | ᅥ        |          |          | Н        | $\vdash$  | $\dashv$ | <del>                                     </del> |
|             | 3        | H         | Т        | T             |            | T            | T              |          | <u> </u>        | $\neg$    |                | 53       |  |          | T               |          | -           | $\dashv$ | _        | $\dashv$                                       | ヿ        |                 | 103        | _               | $\vdash$   |          |          |          |          | $\vdash$  | _        | ┢╾   |
|             | 4        | H         | T        | t             | 1          | T            | $\top$         | 1        | $\vdash$        | П         |                | 54       |  |          | $\neg$          | $\dashv$ | 寸           | 7        | _        |  | 1        |                 | 104        | H               | ╁  | ┪        | $\neg$   |          |          | H         | _        | H  |
|             | 5        | π         | T        |               | İ          |              | T              | 1        |                 | П         |                | 55       | T  |          | ᅥ               |          | $\neg$      | _        | _        |  | 1        | -               | 105        |                 |  | $\dashv$ |          |          |          | Н         | $\neg$   |  |
|             | 6        | П         | 1        |               | $\vdash$   | T            | T              |          |                 | П         |                | 56       | $\vdash$   |          | $\neg \uparrow$ |          |             | _        | $\dashv$ | 十  | 7        |                 | 106        |                 | П  | _        |          |          |          | П         | $\neg$   | $\vdash$   |
|             | 7        | П         | Τ        | Г             |            |              |                |          |                 | П         |                | 57       |  | П        |                 |          | 寸           | 7        | $\dashv$ | 十  | 7        |                 | 107        | _               | $\Box$   | 7        |          |          |          | П         | $\neg$   | _  |
|             | 8        |           |          |               |            | Г            |                |          |                 |           |                | 58       |  |          | $\neg$          | T        | 寸           |          | 寸        |  | 7        |                 | 108        | $\vdash$        | П  | 一        |          |          |          | П         | =        |  |
|             | 9        | П         |          |               |            | Γ            |                |          |                 |           |                | 59       | T  |          | $\neg$          |          |             | 寸        |          |  |          |                 | 109        |                 | П  | _        |          |          |          | П         |          |  |
|             | 10       | Π         | Г        | Г             | Π          |              | П              | Π        | П               |           |                | 60       | T  | $\Box$   | $\neg$          | 一        | $\neg$      | ╗        | 7        |  |          |                 | 110        |                 |  |          |          |          | $\Box$   | 口         | _        |  |
|             | 11       | П         |          |               |            |              |                |          |                 |           |                | 61       | 1  |          | T               |          | $\neg$      | ヿ        | ヿ        | $\neg$   | 7        |                 | 111        |                 |  |          |          |          |          | П         | $\neg$   | Г  |
|             | 12       | Ш         |          |               |            |              |                |          |                 |           |                | 62       |  |          |                 |          |             |          |          |  |          |                 | 112        |                 |  |          |          |          |          | $\Box$    | $\neg$   |  |
|             | 13       | $\prod$   |          |               |            |              |                |          |                 |           |                | 63       |  |          | $\Box$          |          | $\Box$      | I        |          |  |          |                 | 113        |                 |  | ╛        |          |          |          | П         |          |  |
|             | 14       | $\coprod$ | 匚        | Ĺ             |            |              |                |          |                 |           |                | 64       |  |          | $\Box$          |          | J           | ┚        | J        | $oldsymbol{oldsymbol{oldsymbol{oldsymbol{I}}}$ |          |                 | 114        |                 |  |          |          |          |          | $\sqcap$  |          |  |
|             | 15       | Ц         | <u> </u> | 匚             | $oxed{L}$  |              | L              |          |                 |           |                | 65       |  |          |                 |          | $\Box$      | $\Box$   | J        | Ι  |          |                 | 115        |                 |  | ┚        |          |          |          |           |          |  |
|             | 16       | Ц,        | 丄        | L             | L          | <u> </u>     | L              |          | Ш               |           |                | 66       |  |          |                 |          |             |          |          |  |          |                 | 116        |                 |  |          |          |          |          | П         |          |  |
|             |          | ン         |          |               | L          |              | ╙              | L        | Ш               |           |                | 67       |  |          |                 |          |             |          |          |  | _]       |                 | 117        |                 |  |          | ]        |          |          | П         |          |  |
|             | 18       | N         | L        | <u> </u>      | L          | _            | ╙              | L        | Ш               |           | L              | 68       |  |          |                 |          |             |          |          |  |          |                 | 118        |                 |  |          |          |          |          | $\Box$    |          |  |
|             | 19       | 1         | <u> </u> |               | L          |              | <u> </u>       | L        | Ш               |           | <u> </u>       | 69       |  |          |                 |          |             |          |          |  |          |                 | 119        |                 |  |          |          |          |          | $\Box$    |          |  |
|             | 20       | 1         | 辶        |               | L          | <u> </u>     | L              | ᆫ        | Ш               |           | L              | 70       | Ш  |          |                 |          |             | $\perp$  |          |  |          |                 | 120        |                 |  | I        |          |          |          | $\square$ |          |  |
|             | 21       | 4         | L        | L             | _          | Ь.           | lacksquare     | Ш        |                 |           |                | 71       | Ш  |          | _               | _        | $\perp$     |          | $\perp$  |  | _        |                 | 121        |                 |  |          |          |          |          |           |          |  |
|             | 22       | 4         | _        | _             | _          | L.           | <u> </u>       | Ш        |                 |           |                | 72       |  | $\perp$  | _               | _        | _           | _        |          |  | ╛        |                 | 122        |                 |  | $\Box$   | $\Box$   |          |          |           |          |  |
|             | 23       | 4         |          | _             | _          | <u> </u>     | <u> </u>       |          | Щ               | _         |                | 73       | Ш  |          | _               | 4        | _           | $\perp$  | $\perp$  |  | _        |                 | 123        |                 |  |          |          |          |          |           |          |  |
|             | 24       | +         | <u> </u> |               |            | <u> </u>     | _              | _        |                 |           | <u> </u>       | 74       | Ш  | _        | 4               | _        | 4           | _        | _        | _ _  | _        |                 | 124        |                 |  | _        | $\Box$   |          |          |           |          |  |
|             | 25       | 4         | ļ        | _             | L.         | <u> </u>     | <b>├</b>       | _        | $\vdash$        | _         |                | 75       | Ш  | _        | 4               | _        | _           | 4        | 4        | $\dashv$                                       | 4        |                 | 125        | Ш               | $\perp$  | _        | _        | _        | _        |           | _        |  |
|             | 26       | 4         | ļ        | _             | _          | <u> </u>     | ļ              | <u> </u> | $\sqcup$        | _         | <u> </u>       | 76       | $\vdash$   | $\dashv$ | _               | 4        | _           | 4        | 4        | _  | 4        | $\perp$         | 126        |                 |  | _        | _        | _        | _        | _         | Ц        |  |
| -           | 27       | +         | <u> </u> | _             | _          | <u> </u>     | -              |          | $\square$       | _         |                | 77       | Ш  |          | -               | -        | _           | _        | 4        |  | 4        |                 | 127        |                 | $\perp$  | _        | _        |          |          | _         | _        |  |
|             | 28<br>29 | +         | H        |               |            | <b> </b>     | ⊢              | _        |                 |           | <u> </u>       | 78       | Н  | _        | $\dashv$        | 4        | -           | -        | -        | -  | 4        | <b>—</b>        | 128        |                 |  | _        | _        | _        | _        | $\dashv$  | _        |  |
|             | 30       | +         | ⊢        | _             |            | ├            | ├              |          | $\vdash$        |           | <u> </u>       | 79<br>80 | ┝┈   | $\dashv$ | $\dashv$        | _        | -           | 4        |          | -  | 4        |                 | 129        |                 |  | $\dashv$ | _        | _        | _        | $\dashv$  | $\dashv$ |  |
|             |          | +         | -        | _             | -          | ├            | ┝              |          | Н               |           | -              |          | Н  | -+       | -               | _        | -           | -        | $\dashv$ | +  | 4        |                 | 130        |                 | -  | -        | -        | -        |          | $\dashv$  | _        |  |
| <del></del> | 32       | Ŋ         | -        | -             | $\vdash$   | $\vdash$     | $\vdash$       | $\vdash$ | $\vdash$        | $\dashv$  | -              | 81<br>82 | Н  | -+       |                 |          | -+          | $\dashv$ | $\dashv$ | +  | 4        | -               | 131        | -               | $\dashv$   | $\dashv$ |          | -        |          | $\dashv$  | $\dashv$ | _  |
| -           | 33       | Y         | $\vdash$ | -             | $\vdash$   | ├            | $\vdash$       | $\vdash$ | $\vdash \vdash$ | $\dashv$  | $\vdash$       | 83       | $\vdash$   |          |                 | +        | +           | $\dashv$ | +        | -  | $\dashv$ | $\vdash$        | 132        | $\vdash \vdash$ | -+   | -        |          | -        |          | $\dashv$  | $\dashv$ |  |
|             | 34       | +         | H        | $\vdash$      | $\vdash$   | $\vdash$     | $\vdash$       | $\vdash$ | $\vdash \vdash$ | $\dashv$  | <u> </u>       | 84       | Н  | $\dashv$ | -               |          | +           | $\dashv$ | +        |  | $\dashv$ | $\vdash$        | 133<br>134 | $\vdash \vdash$ | $\dashv$   | $\dashv$ | $\dashv$ | -        |          | $\dashv$  | $\dashv$ |  |
|             | 35       | +         | $\vdash$ |               | $\vdash$   | $\vdash$     | +-             | $\vdash$ | H               | $\dashv$  |                | 85       | $\vdash$   | $\dashv$ | $\dashv$        | $\dashv$ | $\dashv$    | $\dashv$ | $\dashv$ | +  | $\dashv$ | $\vdash$        | 135        |                 | +  | +        | $\dashv$ |          |          | $\dashv$  | $\dashv$ | _  |
|             | 36       | +         | $\vdash$ |               | Н          | $\vdash$     | <del>  -</del> | H        | $\vdash$        | $\dashv$  |                | 86       |  | -+       | $\dashv$        | $\dashv$ | +           | +        | $\dashv$ | +  | $\dashv$ | $\vdash \dashv$ | 136        |                 | +  | $\dashv$ |          | $\dashv$ |          | $\dashv$  | $\dashv$ | _  |
|             | 37       | +         | $\vdash$ | -             | Н          | $\vdash$     | <del>  -</del> | H        | $\vdash \dashv$ | $\dashv$  | -              | 87       | Н  | $\dashv$ | +               | $\dashv$ | $\dashv$    | +        | $\dashv$ | +  | ┥        | $\vdash$        | 137        | $\vdash$        | +  | +        | $\dashv$ |          |          | $\dashv$  | $\dashv$ | _  |
|             | 38       | +         | $\vdash$ | $\vdash$      | Н          | $\vdash$     | $\vdash$       | $\vdash$ | $\vdash \vdash$ | $\dashv$  |                | 88       | Н  | $\dashv$ | $\dashv$        | -+       | $\dashv$    | +        | $\dashv$ | +  | -        | $\vdash$        | 138        | $\vdash$        | $\dashv$   | $\dashv$ | $\dashv$ | $\dashv$ |          | $\dashv$  | -        | _  |
|             | 39       | +         |          | _             | $\vdash$   | $\vdash$     |                | $\vdash$ | $\vdash$        | $\dashv$  |                | 89       | Н  | $\dashv$ | $\dashv$        | $\dashv$ | -+          | $\dashv$ | $\dashv$ | +  | $\dashv$ | $\vdash$        | 139        | $\dashv$        | $\dashv$   | $\dashv$ | +        | $\dashv$ | -        | -+        | $\dashv$ | -  |
|             | 40       | +         | $\vdash$ |               | H          | $\vdash$     | $\vdash$       | $\vdash$ | $\vdash$        | $\dashv$  |                | 90       | $\vdash \vdash$                                  | -        | $\dashv$        | $\dashv$ | +           | $\dashv$ | $\dashv$ | ╁  | ┥        | $\vdash$        | 140        | $\vdash$        | +  | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$  | $\dashv$ |  |
|             | 41       | $\dagger$ | ऻऻ       | $\overline{}$ | Н          | $\vdash$     | 1              | H        | $\vdash$        | $\dashv$  |                | 91       | $\vdash$   | +        | $\dashv$        | $\dashv$ | -+          | $\dashv$ | $\dashv$ | +  | ┥        | $\vdash$        | 141        | $\dashv$        | +  | $\dashv$ |          |          | $\dashv$ | $\dashv$  | $\dashv$ | -  |
| $\neg$      | 42       | +         | Н        |               | H          | <del> </del> | ┢              | H        | $\dashv$        | $\dashv$  |                | 92       | $\vdash$   | $\dashv$ | +               | $\dashv$ | $\dashv$    | +        | -+       | +  | $\dashv$ |                 | 142        | $\vdash$        | +  | $\dashv$ | $\dashv$ | $\dashv$ | -        | $\dashv$  | $\dashv$ | $\dashv$   |
| -           | 43       | au        |          | $\vdash$      | H          | $\vdash$     | $\vdash$       | Н        | $\vdash$        | $\dashv$  |                | 93       |  | $\dashv$ | $\dashv$        | 十        | $\dashv$    | +        | $\dashv$ | 十  | 1        | $\vdash$        | 143        |                 | +  | +        | -        | -        | $\dashv$ | $\dashv$  | $\dashv$ | $\dashv$   |
|             | 44       | 1         | П        |               | $\Box$     |              |                | Н        |                 | $\dashv$  |                | 94       | $\vdash$   | +        | $\dashv$        | $\dashv$ | $\dashv$    | $\dashv$ | $\dashv$ | +  | ┪        |                 | 144        | $\dashv$        | $\dashv$   | -        | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$  | $\dashv$ | $\dashv$   |
|             | 45       | ∜         | П        |               | П          |              | Г              | Н        | $\dashv$        | $\dashv$  |                | 95       | $\dashv$   | $\dashv$ | 十               | $\dashv$ | $\dashv$    | +        | $\dashv$ | +  | ٦        |                 | 145        | $\dashv$        | $\dashv$   | $\dashv$ | $\dashv$ | 十        | -        | $\dashv$  | +        | $\dashv$   |
|             | 40       | ~         | П        |               | Н          |              | Г              | $\Box$   |                 | $\dashv$  |                | 96       | $\dashv$   | $\dashv$ | $\dashv$        | $\dashv$ | $\dashv$    | $\dashv$ | $\dashv$ | $\top$   | 7        | $\vdash$        | 146        | $\dashv$        | $\dashv$   | $\dashv$ | +        | $\dashv$ | $\dashv$ | $\dashv$  | $\dashv$ |  |
|             | 47       |           |          |               |            |              |                |          | 1               | $\exists$ |                | 97       | Ħ  | 寸        | 7               | $\dashv$ | $\dashv$    | 十        | 十        | $\dashv$                                       | ┪        |                 | 147        | $\dashv$        | $\dashv$   | $\dashv$ | ┪        | $\dashv$ | $\dashv$ | _         | $\dashv$ | $\dashv$   |
|             | 48       |           |          |               |            |              |                |          | $\dashv$        | $\dashv$  |                | 98       |  | $\neg$   | +               | 7        | 十           | 7        | +        | $\dashv$                                       | ┪        |                 | 148        | _               | +  | $\dashv$ | +        | $\dashv$ | $\dashv$ | $\dashv$  | 十        | $\dashv$   |
|             | 49       | _         |          |               |            |              | П              | $\Box$   | 一               | ┑         |                | 99       | $\neg$   | 7        | $\dashv$        | $\dashv$ | $\dashv$    | $\top$   | $\dashv$ | $\top$   | 1        |                 | 149        |                 | $\dashv$   | $\top$   | 7        | 7        | -+       | $\dashv$  | 一        | ᅱ  |
|             | 50       |           |          |               |            |              | П              |          | $\dashv$        | $\neg$    |                | 100      |  | $\neg$   | 寸               | 寸        | $\dashv$    | $\top$   | $\dashv$ | _  | 7        |                 | 150        | _               | 十  | $\dashv$ | 寸        | $\dashv$ | 一        | $\dashv$  | $\dashv$ | ㅓ  |
|             |          |           |          |               |            |              |                |          | _               |           |                |          |  |          |                 |          |             |          |          |  |          |                 |            |                 |  |          |          |          | _        |           | _        |  |